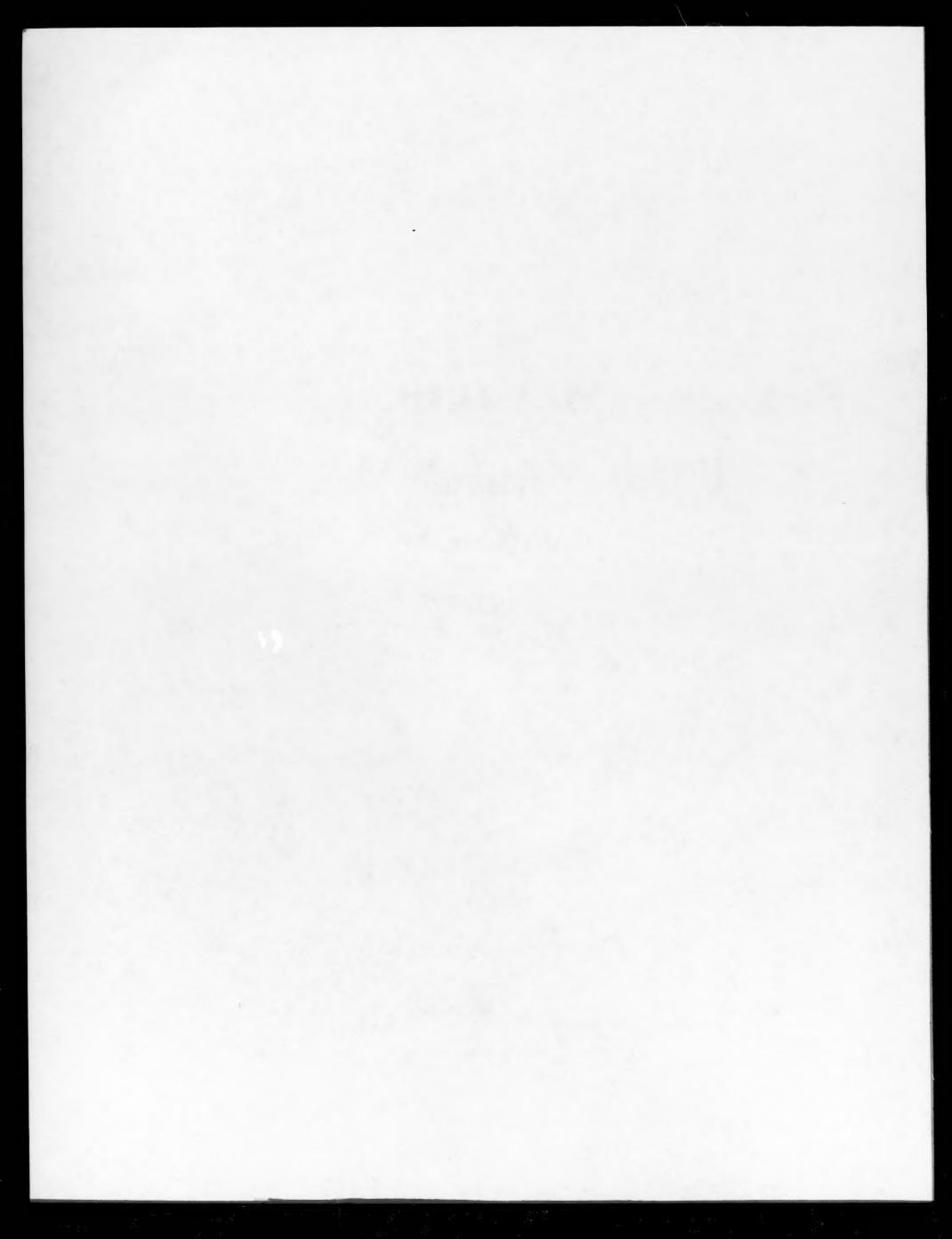
ALCOHOL

Index to

VOLUME 4

1987



VOLUME 4 1987

SUBJECT INDEX

| Abstinence | S-Adenosyl-L-methionine, 81 | tetrahydroisoquinoline |
|---------------------------------------|--|---|
| alcoholism, 283 | acetaldehyde | voluntary alcohol consumption |
| alcohol withdrawal syndrome, 215 | acute alcohol intoxication | Alcohol dependence, 49 |
| anxiety, 215 | alcohol | buspirone |
| event-related brain potentials, 283 | aminolevulinate dehydratase activity | drinking |
| human studies, 215 | glutathione | human cerebrospinal fluid |
| hyperventilation, 215 | liver concentrations | monkeys |
| relapse, 215 | Alcohol | voluntary alcohol intake |
| stimuli, high incentive, 283 | acetaldehyde, 81 | Alcohol dependence syndrome, 135 |
| Acetaldehyde | acute alcohol intoxication, 81 | alcohol abuse |
| acute alcohol intoxication, 81 | S-adenosyl-L-methionine, 81 | biological state markers |
| S-adenosyl-L-methionine, 81 | alpha-adrenergic receptors, 25 | correlation tests |
| alcohol, 81 | aminolevulinate dehydratase activity, | Alcohol drinking, 181 |
| aminolevulinate dehydratase activity, | 81 | hippocampus |
| 81 | auditory evoked potentials, 249 | |
| blood, human, 473 | calcium-(Ca ⁺⁺) ATPase, 25 | tetrahydro-β-carboline |
| catalase, 45 | chronic alcohol ingestion, 485 | Alcohol metabolism, 143 |
| | | cephalosporin antibiotics |
| drug comparisons, 45 | cigarette smoking, 457 | Alcohol preference, 37 |
| ethanol metabolism, 45, 473 | cytosilic Ca ⁺⁺ | gustatory neocortex |
| glutathione, 81 | differential concentration response | Alcohol self-selection, 347 |
| heart homogenates, 45 | curves, 63 | acetaldehyde dehydrogenase |
| high performance liquid | Fetal Alcohol Syndrome, 11 | cyanamide |
| chromatography, 473 | genetic influences, 249 | drinking |
| liver concentrations, 81 | glutathione, 81 | route of administration |
| Acetaldehyde dehydrogenase | guinea pigs, 11 | Alcohol sensitization, 463 |
| alcohol dehydrogenase, 199 | heavy drinking, 509 | diethyldithiocarbamic-acid-methyl-ester |
| alcohol self-selection, 347 | hepatic plasma membranes, 25 | disulfiram |
| clofibrate, 199 | human studies, 509 | disulfiram-ethanol reaction |
| cyanamide, 347 | human studies, women, 457 | dose-dependent effects |
| drinking, 347 | intestinal enzyme activity, 405 | heart rate |
| route of administration, 347 | length-tension relationships, 485 | mean arterial pressure |
| tetrahydroisoquinoline, 199 | liver concentrations, 81 | Alcohol withdrawal syndrome, 215 |
| voluntary alcohol consumption, 199 | marihuana, 457 | abstinence |
| Acetaminophen, 69 | maternal alcohol consumption, 11 | anxiety |
| drug interactions | menstrual cycle, 457 | human studies |
| hepatotoxicity | muscle fiber composition, 485 | hyperventilation |
| N-acetylcysteine | operant behavior, 63 | relapse |
| Acute alcohol intoxication | oral self-administration, 63 | Alcoholic liver disease, 225 |
| acetaldehyde, 81 | postnatal development, 405 | auditory evoked potentials, brainstem |
| S-adenosyl-L-methionine, 81 | prenatal exposure, 405 | auditory evoked potentials, |
| alcohol, 81 | reinforcement, 63 | somatosensory |
| aminolevulinate dehydratase activity, | skeletal muscle development, 11 | hepatic encephalopathy |
| 81 | strain differences, 63 | Alcoholic predisposition, 1 |
| dose-related effects, 293 | urinary dolichol levels, 509 | alcoholism |
| ethanol, 293 | Alcohol abuse | human studies, alcoholics |
| event-related potentials, 293 | alcohol dependence syndrome, 135 | |
| glutathione, 81 | biological state markers, 135 | 5-hydroxyindoleacetic |
| | | acid/anthranilic acid ratio |
| hangover effects, 503 | cognition, 289 | 5-hydroxyindoleacetic |
| human studies, males, 293 | correlation tests, 135 | acid/indoleacetic acid ratio |
| liver concentrations, 81 | ERP components, 289 | serotonin levels |
| open-field behavior, 503 | human studies, 289 | tryptophan metabolism |
| running-wheel activity, 503 | Alcohol, chronic, 231 | Alcoholics |
| temperature regulation, 503 | auditory evoked potentials | event related potentials, 275, 307 |
| visual sustained attention, 293 | human studies, children | family histories, 301 |
| Acute tolerance | in utero exposure | first-degree relatives, 307 |
| chronic administration, 255 | sensorineural hearing loss | human family studies, 307 |
| early evoked potentials, 255 | Alcohol consumption, 449 | human studies, 275, 301 |
| ethanol effects, 255 | enkephalinase inhibition | P3 amplitude, 275 |
| ethanol sensitivity, 57 | genetic breeding | P300, 301 |
| inbred strains, 57 | Alcohol dehydrogenase, 199 | reaction time, 275 |
| selective breeding, 57 | acetaldehyde dehydrogenase | Alcoholism |
| sleep time, 57 | clofibrate | abstinence, 283 |

alcoholic predisposition, 1 relapse correlation tests auditory event-related potentials, 265 **Apparatus** Blood alcohol curve, 77 auditory recovery function, 315 eight-arm maze, 433 dogs cerebral laterality, 127, 207 de-alcoholized beverages, 87 holeboard, 17 ethanol metabolism Area postrema, 169 ethanol pharmacokinetics electroencephalogram, 241 conditioned taste aversion Blood assay, 121 ethanol intake, 149 ethanol aldehyde dehydrogenase activity event-related brain potentials, 283 Atrium, 7 human study event related potentials, 241 Blood chemistry, 175 beta adrenoreceptors family history, 265 chronic ingestion alcoholism identification geographic latitude, 127 contractility human studies, young adults handedness, 127, 207 ethanol Blood ethanol levels health risks, 87 inotropic response 3-amino-1,2,4-triazole pretreatment, 73 human studies, 207, 241 muscarinic adrenoreceptors D,L-carnithine supplementation, 31 human studies, alcoholics, 1, 127 Auditory cortex, 257 catalase, 73 human studies, high risk boys, 315 distractor stimuli ethanol metabolism, 31 human studies, males, 265 5-hydroxyindoleactic acid/anethanol first pass effect, 73 event-related potentials gastrointestinal route, 73 thranilic acid ratio, 1 human studies oral administration, 73 5-hydroxyindoleacetic acid/in-Auditory event-related potentials, 265 rats, males, 31 doleacetic acid ratio, 1 alcoholism Blood human, 473 morphine influences, 149 family history acetaldehyde non-alcoholic beverages, 87 human studies, males ethanol metabolism P3 amplitude, 315 visual event-related potentials high performance liquid season of birth, 127 Auditory evoked potentials chromatography serotonin levels, 1 alcohol, 249 Body temperature, 189 stimuli, high incentive, 283 alcoholic, chronic, 231 elimination rate theoretical considerations, 127 genetic influences, 249 ethanol human studies, children, 231 tryptophan metabolism, 1 selective breeding visual event-related potentials, 265 in utero exposure, 231 strain differences visually evoked potentials, 241 sensorineural hearing loss, 231 Alcoholism identification, 175 Auditory evoked potentials, brainstem, area postrema, 169 blood chemistry brain stem, 419 human studies, young adults alcoholic liver disease cerebellum, 331, 413, 419 Alcoholism, paternal, 323 auditory evoked potentials, cerebral cortex, 109, 493 somatosensory, 225 human studies, young males colliculi, 493 corpus striatum, 413 P3 amplitudes hepatic encephalopathy Auditory evoked potentials, visual event-related potentials dentate gyrus, 367 Aldehyde dehydrogenase, 413 somatosensory, 225 entorhinal cortex, 367 brain, human alcoholic liver disease frontal cortex, 419 3,4-dihydroxyphenylacetaldehyde auditory evoked potentials, brainstem gustatory neocortex, 37 isozyme distribution hepatic encephalopathy hippocampus, 181, 331, 419, 493 Aldehyde dehydrogenase activity, 121 Auditory recovery function, 315 hypothalamus, 419, 493 blood assay alcoholism inferior olive, 331 human studies, high risk boys human study lateral hypothalamus, 209 Alpha-adrenergic receptors, 25 P3 amplitude locus coeruleus, 331 alcohol Axonal sprouting, 367 midbrain, 493 calcium-(Ca++) ATPase ethanol midbrain dorsal raphe, 373 cytosilic Ca+ lesions, entorhinal cortex pons, 413 hepatic plasma membranes Axonal transport, 385 pons-medulla, 493 3-Amino-1,2,4-triazole pretreatment, 73 ethanol exposure striatum, 419, 493 blood ethanol levels peripheral neuropathy vas deferens, 355 catalase sciatic nerve Brain, human, 413 first pass effect aldehyde dehydrogenase gastrointestinal route 3,4-dihydroxyphenylacetaldehyde oral administration isozyme distribution Benzodiazepine antagonist, 425 Aminolevulinate dehydratase activity, 81 ethanol intoxication Buspirone acetaldehyde alcohol dependence, 49 Ro 15-1788 acute alcohol intoxication Benzodiazepine receptor stimulation, 469 drinking, 49, 75 S-adenosyl-L-methionine drinking human cerebrospinal fluid, 49 alcohol monkeys, 49, 75 ethanol glutathione GABA transmission voluntary alcohol intake, 49, 75 liver concentrations Beta adrenoceptors, 7 Antipunishment effects, 481 atrium ethanol chronic ingestion Ca-acetyl homotaurinate rapid induction contractility dose-dependent suppression, 97 tolerance ethanol ethanol toxicities, 103 Anxiety, 215 inotropic response voluntary alcohol intake, 97 Calcium-(Ca++) ATPase abstinence muscarinic adrenoreceptors alcohol withdrawal syndrome alcohol, 25 Biological state markers, 135

alcohol abuse

alcohol dependence syndrome

alpha-adrenergic receptors, 25

Calcium-(Ca++) ATPase, 25

human studies

hyperventilation

alcohol muscarinic adrenoreceptors drug comparisons alpha-adrenergic receptors Cigarette smoking, 457 drug interactions ethanol intake cytosilic Ca+ alcohol hepatic plasma membranes human studies morphine Calcium channel agonist, 355 marihuana Distractor stimuli, 257 ethanol tolerance menstrual cycle auditory cortex in vitro Clofibrate, 199 ethanol acetaldehyde dehydrogenase in vivo event-related potentials vas deferens alcohol dehydrogenase human studies Cardiac electrophysiology, 375 tetrahydroisoquinoline Disulfiram, 463 intracoronary ethanol voluntary alcohol consumption alcohol sensitization Cognition, 289 alcohol abuse ventricular arrhythmias diethyldithiocarbamic-acid-methyl-ester D,L-Carnithine supplementation, 31 disulfiram-ethanol reaction blood ethanol levels ERP components dose-dependent effects ethanol metabolism humans studies heart rate rats, males Conditioned taste aversions mean arterial pressure Catalase area postrema, 169 Disulfiram-ethanol reaction, 463 acetaldehyde, 45 ethanol, 169 alcohol sensitization 3-amino-1,2,4-triazole pretreatment, 73 FLA-57, 21 diethyldithiocarbamic-acid-methyl-ester blood ethanol levels, 73 voluntary alcohol intake, 21 disulfiram Contractility, 7 drug comparisons, 45 dose-dependent effects ethanol metabolism, 45 beta adrenoreceptors heart rate first pass effect, 73 mean arterial pressure gastrointestinal route, 73 chronic ingestion Dogs, 77 heart homogenates, 45 blood alcohol curve ethanol oral administration, 73 inotropic response ethanol metabolism Catalase-H₂O₂, 131 muscarinic adrenoreceptors ethanol pharmacokinetics ethanol metabolism Correlation tests, 135 Dorsal raphe neurons, 373 fatty acids alcohol abuse ethanol H₂O₂ generation alcohol dependence syndrome Dose-dependent effects, 463 **β**-oxidation biological state markers alcohol sensitization Chronic administration, 255 diethyldithiocarbamic-acid-methyl-ester perfused liver Cellular systems, 331 acute tolerance disulfiram electrophysiological action early evoked potentials disulfiram-ethanol reaction ethanol effects ethanol effects heart rate Cephalosporin antibiotics, 143 Cyanamide, 347 mean arterial pressure acetaldehyde dehydrogenase alcohol metabolism Dose-dependent suppression, 97 Cerebellar synapses, 109 alcohol self-selection Ca-acetyl homotaurinate voluntary alcohol intake cerebral cortex drinking route of administration Dose-related effects, 293 chronic alcohol consumption Cytosilic Ca++, 25 acute intoxication molecular layer Cerebral cortex, 109 alcohol ethanol alpha-adrenergic receptors event-related potentials cerebellar synapses calcium-(Ca⁺⁺) ATPase hepatic plasma membranes chronic alcohol consumption human studies, males visual sustained attention molecular laver Cerebral laterality, 127 alcoholism, 127, 207 Drinking acetaldehyde dehydrogenase, 347 geographic latitude, 127 De-alcoholized beverages, 87 alcohol dependence, 49 alcohol self-selection, 347 alcoholism handedness, 127, 207 benzodiazepine receptor stimulation, health risks human studies, 207 human studies, alcoholics, 127 non-alcoholic beverages 469 buspirone, 49, 75 season of birth, 127 Diethyldithiocarbamic-acid-methyl-ester, cvanamide, 347 theoretical considerations, 127 alcohol sensitization diprenorphine, 161 Choline deficiency, 395 ethanol disulfiram drug comparisons, 161 disulfiram-ethanol reaction drug interactions, 157, 161 heart carnithine dose-dependent effects ethanol, 157, 469 liquid diet ethanol intake, 161 methionine deficiency heart rate Chronic alcohol consumption, 109 mean arterial pressure GABA transmission, 469 cerebellar synapses Differential concentration response human cerebrospinal fluid, 49 monkeys, 49, 75 cerebral cortex curves, 63 morphine, 161 molecular layer alcohol Chronic alcohol ingestion, 485 operant behavior opioids, 157 oral self-administration rats, female, 157 alcohol reinforcement route of administration, 347 length-tension relationships voluntary alcohol intake, 49, 75 strain differences muscle fiber composition Chronic ingestion, 7 Dipoles, 339 Drug evoked potentials acetaldehyde, 45 beta adrenoreceptors magnetoencephalography acetaminophen, 69 atrium S-adenosyl-L-methionine, 81 contractility source-systems alcohol, 11, 21, 25, 37, 49, 63, 69, 75, 109, 135, 181, 199, 231, 249, 405, ethanol Diprenorphine, 161 drinking inotropic response

germ cells, male, 401 449, 457, 485, 509 drinking, 157, 161 alprazolam, 469 3-amino-1,2,4-triazole, 73, 45 drug comparisons, 157, 161 heart carnithine, 395 ethanol, 157 human studies, 257 human studies, males, 293 AOAA, 469 ethanol intake, 161 baclofen, 469 hepatotoxicity, 69 inotropic response, 7 buspirone, 49, 75 morphine, 161 intracranial self-stimulation, 209 N-acetylcysteine, 69 opioids, 157 Ca-acetyl homotaurinate, 97, 103 in vitro, 429 lateral hypothalamus, 209 D,L-carnithine, 31 cefamandole, 143 rats, females, 157 lesions, entorhinal cortex, 367 cefoperazone, 143 DSP4, 419 liquid diet, 395 cerebellum, 493 ethanol sensitivity locomotor activity, 17 clofibrate, 199 clonidine, 25 methionine deficiency, 395 monoamine levels muscarinic adrenoreceptors, 7 selectively bred mice cyanamide, 347 mutagenic effect, 401 diazepam, 469 opioids, 157 physical dependence, 443 diethyldithiocarbamic-acid-meth-Early evoked potentials, 255 pituitary cells, 429 yl-ester, 463 acute tolerance diisopropylfluorophosphate, 189 chronic administration prolactin, 429 di-potassium phosphate, 45 radial arm maze, 433 ethanol effects rapid induction, 481 diprenorphine, 157, 161 DSP4, 419 **Eating** rats, female, 157 drug comparisons, 157 disulfiram, 45 Electroencephalogram, 241 reinforcement thresholds, 209 ethanol, 7, 17, 31, 45, 57, 73, 77, 97, repeated withdrawal, 433 alcoholism 103, 149, 157, 161, 169, 189, 209, route of administration, 209 event related potentials 255, 257, 293, 355, 367, 373, 375, selective breeding, 189 human studies 385, 391, 395, 401, 409, 419, 429, visually evoked potentials stereotypic wall climbing, 443 433, 437, 443, 469, 481, 493, 503 strain differences, 17, 189 Electrophysiological action, 331 fentanyl, 157 FLA-57, 21 substrate utilization, 437 cellular systems tertiary-britanol, 437 ethanol effects glucose oxidase, 45 Elimination rate, 189 tolerance, 481 hipecotic acid, 469 visual sustained attention, 293 body temperature x-ray irradiation, 401 hydrocinnamic, 449 ethanol marihuana, 457 selective breeding Ethanol effects methanol, 131 strain differences acute tolerance, 255 4-methylprazole, 169 Energy expenditure, 437 cellular systems, 331 morphine, 149, 157, 161 ethanol chronic administration, 255 moxalactam, 143 substrate utilization early evoked potentials, 255 muscimol, 469 tertiary-britanol electrophysiological action, 331 N-acetylcysteine, 69 Enkephalinase inhibition, 449 Ethanol exposure, 385 alcohol consumption axonal transport NaCl, 469 naloxone, 117 nicotine, 493 genetic breeding peripheral neuropathy ERP components, 289 sciatic nerve nifedipine, 355 alcohol abuse Ethanol intake norepinephrine, 355 cognition alcoholism, 149 phenobarbital, 189 human studies diprenorphine, 161 D-phenylalanine, 449 Ethanol drinking, 161 phenylephrine, 25 drug comparisons, 161 acute intoxication, 293 potassium dihydrogen phosphate, 45 beta adrenoreceptors, 7 drug interactions, 161 prazosin, 25 morphine, 161 antipunishment effects, 481 progabide, 469 area postrema, 169 morphine influences, 149 pyrazole, 169 atrium, 7 water deprivation, 117 Ro 15-1788, 425 water intake, 117 auditory cortex, 257 Ro 15-4513, 409 axonal sprouting, 367 Ethanol intoxication, 425 tertiary-britanol, 437 benzodiazepine receptor stimulation, benzodiazepine intoxication 1,2,3,4-tetrahydro-β-carboline, 181 Ro 15-1788 yohimbine, 25 body temperature, 189 Ethanol metabolism acetaldehyde, 45, 473 Drug comparisons choline deficiency, 395 acetaldehyde, 45 chronic ingestion, 7 blood alcohol curve, 77 catalase, 45 conditioned taste aversion, 169 blood ethanol levels, 31 contractility, 7 blood, human, 473 diprenorphine, 161 drinking, 157, 161 distractor stimuli, 257 D,L-carnithine supplementation, 31 drug interactions, 157, 161 dorsal raphe neurons, 373 catalase, 45 ethanol, 157 dose-related effects, 293 catalase-H₂O₂, 131 ethanol intake, 161 drinking, 157, 469 dogs, 77 ethanol metabolism, 45 drug comparisons, 157 drug comparisons, 45 heart homogenates, 45 drug interactions, 157 ethanol pharmacokinetics, 77 morphine, 161 elimination rate, 189 fatty acids, 131 opioids, 157 heart homogenates, 45 energy expenditure, 437 rats, females, 157 ethanol withdrawal, 443 high performance liquid Drug interactions event-related potentials, 257, 293 chromatography, 473 acetaminophen, 69 exploratory activity, 17 H₂O₂ generation, 131 β-oxidation, 131 diprenorphine, 161 GABA transmission, 469

perfused liver, 131 rats, males, 31 Ethanol pharmacokinetics, 77 blood alcohol curve dogs ethanol metabolism Ethanol sensitivity acute tolerance, 57 DSP4, 419 inbred strains, 57 monoamine levels, 419 selective breeding, 57 selectively bred mice, 419 sleep time, 57 Ethanol tolerance, 355 calcium channel agonist in vitro in vivo vas deferens Ethanol toxicities, 103 Ca-acetyl homotaurinate Ethanol-stress interaction, 391 stress, handling stress, immobilization ulcer formation Ethanol withdrawal ethanol, 443 physical dependence, 443 RO 15-4513, 409 seizures, 409 stereotypic wall climbing, 443 Event-related brain potentials, 283 abstinence alcoholism stimuli, high incentive Event-related potentials acute intoxication, 293 alcoholics, 275, 307 alcoholism, 241 auditory cortex, 257 distractor stimuli, 257 dose-related effects, 293 electroencephalogram, 241 ethanol, 257, 293 first-degree relatives, 307 human family studies, 307 human studies, 241, 257, 275 human studies, males, 293 P3 amplitudes, 275 reaction time, 275 visual sustained attention, 293 visually evoked potentials, 241 Evoked potentials, 339 dipoles magnetoencephalography source-systems Exploratory activity, 17 ethanol locomotor activity strain differences Family histories, 301 alcoholics human studies P300 Family history, 265 alcoholism auditory event-related potentials human studies, males visual event-related potentials

Fatty acids, 131

catalase-H2O2 ethanol metabolism H₂O₂ generation **β**-oxidation perfused liver Fetal alcohol syndrome, 11 alcohol guinea pigs maternal alcohol consumption skeletal muscle development First-degree relatives, 307 alcoholics event-related potentials human family studies First pass effect, 73 3-amino-1,2,4-triazole pretreatment blood ethanol levels catalase gastrointestinal route oral administration FLA-57, 21 conditioned taste aversion voluntary alcohol intake Florigenic high performance liquid chromatography, 477 human studies plasma acetaldehyde determination

Gastrointestinal route, 73 3-amino-1,2,4-triazole pretreatment blood ethanol levels catalase first pass effect oral administration GABA transmission, 469 benzodiazepine receptor stimulation drinking ethanol Genetic breeding, 449 alcohol consumption enkephalinase inhibition Genetic influences, 249 alcohol auditory evoked potentials Geographic latitude, 127 alcoholism cerebral laterality handedness human studies, alcoholics

theoretical considerations
Germ cells, male, 401
ethanol
mutagenic effect
x-ray irradiation
Glutathione, 81
acetaldehyde
acute alcohol intoxication
S-adenosyl-L-methionine
alcohol
aminolevulinate dehydratase activity

season of birth

liver concentrations
Guinea pigs, 11
alcohol
Fetal Alcohol Syndrome
maternal alcohol consumption
skeletal muscle development
Gustatory neocortex, 37
alcohol preference

Handedness, 127 alcoholism, 127, 207 cerebral laterality, 127, 207 geographic latitude, 127 human studies, alcoholics, 127 season of birth, 127 theoretical considerations, 127 Hangover effects, 503 acute ethanol intoxication open-field behavior running-wheel activity temperature regulation Health risks, 87 alcoholism de-alcoholized beverages non-alcoholic beverages Heart carnithine, 395 choline deficiency ethanol liquid diet methionine deficiency Heart homogenates, 45 acetaldehyde catalase drug comparions ethanol metabolism Heart rate, 463 alcohol sensitization diethyldithiocarbamic-acid-methyl-ester disulfiram disulfiram-ethanol reaction dose-dependent effects mean arterial pressure Heavy drinking, 509 alcohol human studies urinary dolichol levels Hepatic encephalopathy, 225 alcoholic liver disease auditory evoked potentials, brainstem auditory evoked potentials, somatosensory Hepatic plasma membranes, 25 alcohol

somatosensory
Hepatic plasma membranes, 25
alcohol
alpha-adrenergic receptors
calcium-(Ca++) ATPase
cytosilic Ca++
Hepatotoxicity, 69
acetaminophen
drug interactions

N-acetylcysteine High performance liquid chromatography, 473 acetaldehyde

blood, human ethanol metabolism Hippocampus, 181 alcohol drinking tetrahydro-β-carboline H₂O₂ generation, 131

catalase- H_2O_2 ethanol metabolism fatty acids β -oxidation perfused liver

Human cerebrospinal fluid, 49
alcohol dependence
buspirone
drinking
monkeys
voluntary alcohol intake
Human family studies, 307

alcoholics event-related potentials first-degreee relatives Human studies abstinence, 215 alcohol, 509 alcohol abuse, 289 alcohol withdrawal syndrome, 245 alcoholics, 275, 301 alcoholism, 207, 241 aldehyde dehydrogenase activity, 121 anxiety, 215 auditory cortex, 257 blood assay, 121 cerebral laterality, 207 cognition, 289 distractor stimuli, 257 electroencephalogram, 241 ERP components, 289 ethanol, 257 event related potentials, 241, 257, 275 family histories, 301 florigenic high performance liquid chromatography, 477 handedness, 207 heavy drinking, 509 hyperventilation, 215 P3 amplitude, 275 P300, 301 plasma acetaldehyde determination, 477 reaction time, 275 relapse, 215 urinary dolichol levels, 509 visually evoked potentials, 241 Human studies, alcoholics alcoholic predisposition, 1 alcoholism, 1, 127 cerebral laterality, 127 geographic latitude, 127 handedness, 127 5-hydroxyindoleacetic acid/anthranilic acid ratio, 1 5-hydroxyindoleacetic acid/indoleacetic acid ratio, 1 season of birth, 127 serotonin levels, 1 theoretical considerations, 127 tryptophan metabolism, 1 Human studies, children, 231 alcohol, chronic auditory evoked potentials in utero exposure sensorineural hearing loss Human studies, high risk boys, 315 alcoholism auditory recovery function P3 amplitude Human studies, males acute intoxication, 293 alcoholism, 265 auditory event-related potentials, 265 dose-related effects, 293 ethanol, 293 event-related potentials, 293 family history, 265 visual event-related potentials, 265 visual sustained attention, 293 Human studies, young adults, 175 alcoholism identification blood chemistry Human studies, young males, 323

alcoholism, paternal

P3 amplitudes visual event-related potentials Human studies, women, 457 alcohol cigarette smoking marihuana menstrual cycle 5-Hydroxyindoleacetic acid/anthranilic acid ratio, 1 alcoholic predisposition alcoholism human studies, alcoholics 5-hydroxyindoleacetic acid/indoleacetic acid ratio serotonin levels tryptophan metabolism 5-Hydroxyindoleacetic acid/indoleacetic acid ratio, 1 alcoholic predisposition alcoholism human studies, alcoholics 5-hydroxyindoleacetic acid/anthranilic acid ratio serotonin levels tryptophan metabolism Hyperventilation, 215 abstinence alcohol withdrawal syndrome anxiety human studies relapse

Inbred strains, 57 acute tolerance ethanol sensitivity selective breeding sleep time Inotropic response, 7 beta adrenoreceptors atrium chronic ingestion contractility ethanol muscarinic adrenoreceptors Intestinal enzyme activity, 405 alcohol postnatal development prenatal exposure Intracoronary ethanol, 375 cardiac electrophysiology ventricular arrhythmias Intracranial self-stimulation, 209 ethanol lateral hypothalamus reinforcement thresholds route of administration In utero exposure, 231 alcohol, chronic auditory evoked potentials human studies, children

sensorineural hearing loss

ethanol, 429 ethanol tolerance, 355

pituitary cells, 429

vas deferens, 355

in vivo, 355

In vivo, 355

prolactin, 429

calcium channel agonist, 355

In vitro

calcium channel agonist
ethanol tolerance
in vitro
vas deferens
Isozyme distribution, 413
aldehyde dehydrogenase
brain, human
3,4-dihydroxyphenylacetaldehyde

Lateral hypothalamus, 209 ethanol intracranial self-stimulation reinforcement thresholds route of administration Length-tension relationships, 485 alcohol chronic alcohol ingestion muscle fiber composition Lesions, entorhinal cortex, 367 axonal sprouting ethanol Liquid diet, 395 choline deficiency ethanol heart carnithine methionine deficiency Liver concentrations, 81 acetaldehyde acute alcohol intoxication S-adenosyl-L-methionine alcohol aminolevulinate dehydratase activity glutathione Locomotor activity, 17 ethanol exploratory activity strain differences

Magnetoencephalography, 339 dipoles evoked potentials source-systems Marihuana, 457 alcohol cigarette smoking human studies, women menstrual cycle Maternal alcohol consumption, 11 alcohol Fetal Alcohol Syndrome guinea pigs skeletal muscle development Mean arterial pressure, 463 alcohol sensitization diethyldithiocarbamic-acidethyl-ester disulfiram disulfiram-ethanol reaction dose-dependent effects heart rate Menstrual cycle, 457 alcohol cigarette smoking human studies, women marihuana Methionine deficiency, 395 choline deficiency ethanol heart carnithine liquid diet

strain differences Method alcohol florigenic high performance liquid Opioids, 157 intestinal enzyme activity drinking chromatography, 477 postnatal development high performance liquid drug comparisons Prolactin, 429 chromatography, 121, 419, 473 drug interactions ethanol high performance liquid ethanol in vitro chromatography with rats, females pituitary cells amperometric detection, 1 Oral administration, 73 noise task, 275 3-amino-1,2,4-triazole pretreatment probability task, 275 blood ethanol levels Radial arm maze, 433 Molecular layer, 109 catalase ethanol cerebellar synapses first pass effect repeated withdrawal cerebral cortex gastrointestinal route Rapid induction, 481 chronic alcohol consumption Oral self-administration, 63 antipunishment effects Monkeys, 49 alcohol ethanol alcohol dependence differential concentration response tolerance buspirone, 49, 75 curves Rats, female, 157 drinking drinking, 49, 75 operant behavior reinforcement human cerebrospinal fluid drug comparisons voluntary alcohol intake, 49, 75 strain differences drug interactions Monoamine levels, 419 β -Oxidation, 131 ethanol DSP4 catalase-H2O2 opioids ethanol metabolism ethanol sensitivity Rats, male, 31 selectively bred mice fatty acids blood ethanol levels Morphine, 161 H₂O₂ generation D,L-carnithine supplementation diprenorphine perfused liver ethanol metabolism drinking Reaction time, 275 drug comparisons alcoholics drug interactions P3 amplitude event related potentials ethanol intake alcoholics, 275 human studies Morphine influences, 149 alcoholism, 315 P3 amplitude alcoholism alcoholism, paternal, 323 Reinforcement, 63 ethanol intake auditory recovery function, 315 alcohol Muscarinic adrenoreceptors, 7 event related potentials, 275 differential concentration response human studies, 275 human studies, high risk boys, 315 beta adrenoreceptors curves atrium operant behavior human studies, young males, 323 reaction time, 275 chronic ingestion oral self-administration contractility strain differences ethanol visual event-related potentials, 323 Reinforcement thresholds, 209 P300, 301 inotropic response ethanol Muscle fiber composition, 485 alcoholics intracranial self-stimulation family histories lateral hypothalamus alcohol chronic alcohol ingestion human studies route of administration length-tension relationships Relapse, 215 **Peptides** Mutagenic effect, 401 prolactin, 429 abstinence ethanol Perfused liver, 131 alcohol withdrawal syndrome germ cells, male catalase-H2O2 anxiety x-ray irradiation ethanol metabolism human studies fatty acids hyperventilation Repeated withdrawal, 433 H₂O₂ generation ethanol N-acetylcysteine, 69 **B**-oxidation radial arm maze Peripheral neuropathy, 385 acetaminophen drug interactions axonal transport Ro 15-1788, 425 hepatotoxicity ethanol exposure benzodiazepine antagonist Nicotine receptor binding, 493 sciatic nerve ethanol intoxication RO 15-4513, 409 Physical dependence, 443 seizures, nicotine-induced ethanol withdrawal selective breeding ethanol Non-alcoholic beverages, 87 ethanol withdrawal seizures stereotypic wall climbing Route of administration alcoholism de-alcoholized beverages Pituitary cells, 429 acetaldehyde dehydrogenase, 347 health risks ethanol alcohol self-selection, 347 Open-field behavior, 503 in vitro cyanamide, 347 prolactin acute ethanol intoxication drinking, 347 ethanol, 209 Plasma acetaldehyde determination, 477 hangover effects intracranial self-stimulation, 209 running-wheel activity florigenic high performance liquid temperature regulation chromatography lateral hypothalamus, 209 Operant behavior, 63 human studies reinforcement thresholds, 209 Postnatal development, 405 alcohol Running-wheel activity, 503 acute ethanol intoxication differential concentration response alcohol intestinal enzyme activity hangover effects curves oral self-administration prenatal exposure open-field behavior

Prenatal exposure, 405

reinforcement

temperature regulation

Sciatic nerve, 385 axonal transport ethanol exposure peripheral neuropathy Season of birth, 127 alcoholism

cerebral laterality geographic latitude handedness human studies, alcoholics theoretical considerations

Seizures, 409 ethanol withdrawal RO 15-4513

Seizures, nicotinic-induced, 493 nicotinic receptor binding selective breeding

Selective breeding
acute tolerance, 57
body temperature, 189
elimination rate, 189
ethanol, 189
ethanol sensitivity, 57
inbred strains, 57
nicotinic receptor binding, 493
seizures, nicotine-induced, 493
sleep time, 57
strain differences, 189

strain differences, 189
Selectively bred mice, 419
DSP4
ethanol sensitivity

monoamine levels
Sensorineural hearing loss, 231
alcohol, Cironic
auditory evoked potentials

human studies, children in utero exposure

Serotonin levels, 1
alcoholic predisposition
alcoholism
human studies, alcoholics
5-hydroxyindoleacetic acid/anthranilic acid ratio
5-hydroxyindoleacetic acid/indoleacetic acid ratio

tryptophan metabolism Skeletal muscle development, 11 alcohol Fetal Alcohol Syndrome

guinea pigs maternal alcohol consumption

Sleep time, 57
acute tolerance
ethanol sensitivity
inbred strains
selective breeding

Source-systems, 339 dipoles evoked potentials magnetoencephalography

Stereotypic wall climbing, 443 ethanol ethanol withdrawal physical dependence Stimuli, high incentive, 283 abstinence alcoholism event-related brain potentials

Strain difference
alcohol, 17, 63, 189
body temperature, 189
differential concentration response
curves, 63
elimination rate, 189
exploratory activity, 17
locomotor activity, 17
operant behavior, 63
oral self-administration, 63
reinforcement, 63
selective breeding, 189

Stress, handling, 391 ethanol-stress interaction stress, immobilization ulcer formation

Stress, immobilization, 391 ethanol-stress interaction stress, handling ulcer formation

Substrate utilization, 437 energy expenditure ethanol tertiary-butanol

Temperature regulation, 503
acute ethanol intoxication
hangover effects
open-field behavior
running-wheel activity

Tertiary-butanol, 437 energy expenditure ethanol

substrate utilization Tetrahydro-β-carboline, 181 alcohol drinking

hippocampus
Tetrahydroisoquinoline, 199
acetaldehyde dehydrogenase
alcohol dehydrogenase
clofibrate
voluntary alcohol consumption

Theoretical considerations, 127 alcoholism cerebral laterality geographic latitude handedness human studies, alcoholics

season of birth
Tolerance, 481
antipunishment effects
ethanol
rapid induction

Tryptophan metabolism, 1
alcoholic predisposition
alcoholism
human studies, alcoholics
5-hydroxyindoleacetic acid/anthranilic acid ratio
5-hydroxyindoleacetic acid/indoleacetic acid ratio

serotonin levels

Ulcer formation, 391 ethanol-stress formation stress, immobilization stress, handling Urinary dolichol levels, 509

alcohol
heavy drinking
human studies

Van deferens, 355
calcium channel agonist
ethanol tolerance
in vitro
in vivo

Ventricular arrhythmias, 375 cardiac electrophysiology intracoronary ethanol

intracoronary ethanol
Visual event-related potentials
alcoholism, 265
alcoholism, paternal 323
auditory event-related potentials, 265
family history, 265
human studies, males, 265
human studies, young males, 323
P3 amplitudes, 323

Visual sustained attention, 293 acute intoxication dose-related effects ethanol event-related potentials human studies, males

Visually evoked potentials, 241 alcoholism electroencephalogram event related potentials

human studies
Voluntary alcohol intake
acetaldehyde dehydrogenase, 199
alcohol dehydrogenase, 199
alcohol dependence, 49
buspirone, 49, 75
Ca-acetyl homotaurinate, 97
clofibrate, 199
conditioned taste aversion, 21
dose-dependent suppression, 97
drinking, 49, 75
FLA-57, 21

human cerebrospinal fluid, 49 monkeys, 49, 75 tetrahydroisoquinoline, 199 Water deprivation, 117

ethanol intake water intake Water intake, 117 ethanol intake water deprivation

X-ray irradiation, 401 ethanol germ cells, male mutagenic effect

AUTHOR INDEX

| Adinoff, B., 293 |
|-----------------------|
| Agarwal, D. P., 413 |
| Anton, R. F., 443 |
| Arabadjis, P. G., 485 |
| Atrens, D. M., 437 |

Baff, M., 339
Baker, S. P., 7
Batlle, A. M. del. C., 81
Becker, H. C., 443
Begleiter, H., 223, 283, 315
Bensinger, C. C., 161
Berger, R., 31
Bihari, B., 283
Bloom, F. E., 301, 331
Blum, K., 449
Boismare, F., 469
Boland, F. J., 21
Brickett, P., 339
Briggs, A. H., 449

Campbell, K. B., 257
Carpentier, R. G., 7
Carter, E. A., 69
Cassel, J. C., 367
Chamberlin, H. M., 241
Chan, A. W. K., 175, 485
Cheyne, D. O., 339
Chu, N.-S., 225, 373
Church, M. W., 231
Cole, T. B., 11
Collins, A. C., 189, 493
Collins, D. M., 49
Collins, M. A., 473
Crisp, D., 339
Critcher, E. C., 347
Czirr, S. A., 117, 149, 157, 161

Doust, M., 469 de Fiebre, C. M., 493 DeLallo, L., 449 DePalma, N., 323 DeTurck, K. H., 355 Diamond, I., 255 Dikkenberg, G. M., 215 Dodd, H., 395 Doffoel, M., 405 Dormer, K. J., 375 Durlach, J., 97, 103 Dustman, R. E., 241 Dystra, C., 339

Eckardt, M. J., 293, 315 Edmonds, B. T., 485 Elmer, G. I., 63 Emanuele, M. A., 429 Emanuele, N. V., 429 Emmerson, R. Y., 241 Erickson, C. K., 75, 139, 221, 513

Faiman, M. D., 463 Flipo, J. L., 469 Ford, J. M., 275 Frank, J. M., 157 Freedman, R., 249 Frowein, H. W., 293 Fukuda, H., 81

Gallegos, J. C., 77 Galluser, M., 405 Gandhi, V. C., 25 George, F. R., 63 Gerhardt, G., 419 Glavin, G. B., 391 Goedde, H. W., 413 Gosse, F., 405 Griffin, M. L., 457 Gustafsson, K., 503

Hafer, G., 413
Hall, A. M., 391
Hamalainen, J., 509
Handler, J. A., 131
Hardacker, J. W., 485
Harrop, R., 339
Helander, A., 121
Henneman, W. W., 7
Hesselbrock, V., 323
Hill, S. Y., 307
Holmes, L. J., 437
Hubbell, C. L., 117, 149, 157, 161
Hunt, W. A., 169
Huttunen, P., 181

Jackson, J. E., 77 Jirasek, M., 437

Karanian, J. W., 409 Keenan, L., 373 Kiefer, S. W., 37 Kirsteins, L., 429 Kissin, B., 283 Kitson, T. M., 143 Koob, G. F., 481 Kosanke, S. D., 375 Koskinen, P., 509 Kozicki, P. A., 81

Lane, E. A., 293
Lawrence, A. M. 429
Lawrence, G. J., 37
Lazzara, R., 375
Ledig, M., 405
Lee, J., 169
Le Magnen, J., 97, 103
Lex, B. W., 457
Lhuintre, J. P., 469
Linnoila, M., 293
Lister, R. G., 17, 409
London, W. P., 127, 207
Long, D. A., 77
Lowick, B. M., 257

McLane, J. A., 385

McLane, M. M., 77 McLean, G. A., 265 McMillen, B. A., 1 Maier, D. M., 433 Mardones, J., 73 Markert, L., 391 Martin, C., 97 Masur, J., 135, 425 Medhurst, L. J., 493 Meisch, R. A., 63 Mello, N. K., 457 Mendelson, J. H., 457 Metcalfe, L., 429 Metzler, C. W., 37 Michael, R. P., 209 Milano, W. C., 157 Monteiro, M. G., 135 Moore, N., 469 Myers, R. D., 49, 181, 347

Nyquist-Battie, C., 11

O'Connor, S., 323 Oliveira de Souza, M. L., 425 Oscar-Berman, M., 289

Pacteau, C., 367 Palmer, M. R., 419 Parasuraman, R., 293 Pare, W. P., 391 Paredes, S. R., 81 Patterson, B. W., 265 Patterson, E., 375 Paula-Barbosa, M. M., 109 Pendergast, D. R., 485 Penna, M., 45 Peterson, C. M., 477 Pfefferbaum, A., 275 Pires, M. L. N., 425 Pohorecky, L. A., 355, 433 Polich, J., 301 Polizzi, C. M., 477 Porjesz, B., 283, 315 Posner, P., 7 Pylkkänen, L., 401

Rabin, B. M., 169
Randall, C. L., 443
Raul, F., 405
Rawlings, R., 315
Reda, D., 429
Reid, L. D., 117, 149, 157, 161
Robertson, A., 339
Rockman, G. E., 391
Roelofs, S. M., 215
Rohrbaugh, J. W., 223, 293
Roine, R. P., 509
Romm, E., 189
Rosenbloom, R., 275
Ross, D. H., 25
Rossetti, M. V., 81

Sachan, D. S., 31

Salaspuro, M., 509 Saligaut, C., 469 Salonon, I., 401 Schaefer, G. J., 209 Schaefer, J. M., 87 Schaeffer, K. W., 265 Schafer, J., 481 Schaper, J., 375 Scherlag, B. J., 375 Schlicht, I., 199 Shearer, D. E., 241 Shorey-Kutschke, R. L., 395 Siggins, G. R., 331 Silva-Filho, A. R., 425 Sinclair, J. D., 503 Sirota, P., 21 Siviy, S. M., 437 Smith, L. T., 265 Smolen, A., 57 Smolen, T. N., 57 Soffia, F., 45 Soneru, I., 429 Spuhler, K., 419 Stapleton, J. M., 293 Steinhauer, S. R., 307 Suokas, A., 509

Tampier, L., 73
Tasman, A., 323
Tavares, M. A., 109
Thomason, S. M., Jr., 1
Thurman, R. G., 131
Tottmar, O., 121
Trachtenberg, M. C., 449
Tran, G., 97, 103
Tzamaloukas, A. H., 77

Ung-Chhun, N. S., 473 Uphoff, C., 11

van de Kamp, J. L., 57 Varner, J. L., 293 Verwer, R. W. H., 109 Volanth, A. J., 161

Waldo, C. I., III, 249 Waldo, M., 249 Wall, T. L., 481 Wallace, J. E., 449 Weinberg, H., 339 Welte, J. W., 175 Whitney, R. B., 175 Will, B. E., 367 Williams, H. L., 265 Wilson, J. R., 249

Yang, S.-S., 225 Ylikahri, R., 509 York, J. L., 485 Yourick, J. J., 463 Zubin, J., 307 Zubovic, E. A., 293

